IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

Appl. No.:	10/694,311	Confirmation No. 3566
Applicant:	Tommy L. Davis, Jr.	
Filed:	October 27, 2003	
Title:	SYSTEM AND METHOD FOR TRACKING AUTHENTICATED ITEMS	
Art Unit:	3687	
Examiner:	Iwarere, Oluseye	
Docket No.:	013657.00005	
Customer No.:	33649	

Mail Stop Appeal Brief - Patents
Commissioner for Patents
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ATTENTION: Board of Patent Appeals and Interferences

REPLY TO EXAMINER'S ANSWER

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I. STATUS OF CLAIMS (37 C.F.R. §41.37(c)(iii))

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 22

B. STATUS OF ALL THE CLAIMS IN APPLICATION

1. Claims rejected: Claims 1-22

2. Claims cancelled: None

C. CLAIMS ON APPEAL

The claims on appeal are: Claims 1-22

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether the Specification discloses the corresponding structure for the means plus function elements.

2. Whether claims 15 and 16 are properly rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

3. Whether claims 15 and 16 are properly rejected under 35 U.S.C. 101.

4. Whether claims 1 and 4-20 and 22 are properly rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,963,134 to Bowers et al.

5. Whether claims 2 and 3 are properly rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers et al. in view of U.S. Patent No. 5,380,047 to Molee et al.

6. Whether claim 21 is properly rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers et al. in view of U.S. Patent No. 5,732,401 to Conway.

7. **(New)** Response to Examiner's Arguments

III. ARGUMENT

7. The Examiner has failed to apply controlling law in construing the claims.

As previously discussed, claim construction is reviewed *de novo*. No deference is given to the Examiner's construction.

Rejection of Claims 15 and 16 under 35 USC 112, second paragraph. In regards to claims 15 and 16, the Examiner has failed to properly construe the claimed means plus function limitations under controlling Federal Circuit law. In *Allvoice Computing PLC v. Nuance Commun.*, 504 F.3d 1246, 1240-41 (Fed. Cir. 2007), the Federal Circuit discussed the proper process for claim construction of a means-plus-function limitation for computer-implemented inventions. "Claim construction of a means-plus-function limitation includes two steps. First, the court must determine the claimed function. Second, the court must identify the corresponding structure in the written description of the patent that performs the function." *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1332 (Fed. Cir.2006). "The determination of the claimed function and corresponding structure of a means-plus-function claim limitation is a question of law, reviewed de novo." *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1087 (Fed. Cir.2003). Under 35 U.S.C. § 112 ¶ 2 and ¶ 6, a means-plus-function clause is indefinite if a person of ordinary skill in the art would be unable to recognize the structure in the specification and associate it with the corresponding function in the claim. *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1381-82 (Fed. Cir.1999)."

As a preliminary matter, the Examiner has failed to identify the claimed function. However, since claim construction is reviewed *de novo*, remand to the Examiner is unnecessary. For claim 15, consider the element of "means for receiving owner registration data and item data." The function is "receiving owner registration data and item data."

Next, the corresponding structure must be identified. This has been done in Appellant's Brief, and is 702 to 708 of Fig. 7 and the associated description at page 19, line 34 to page 20, line 20 of the specification. Fig. 7 was provided in Appellant's Brief, and will not be repeated here, but it is noted that 702 to 708 disclose a flowchart algorithm that includes the step of "receive owner registration data and item data." As such, there is identity of the claimed function in the flowchart algorithm.

The next error committed by the Examiner is the failure to specify the proficiency of the

hypothetical person of ordinary skill in the art that is essential to administering the definiteness test. However, the Appellants do not disagree with the Federal Circuit in *Allvoice* at 1240 that "someone who has a degree in computer science or something equivalent and 2-3 years experience programming" would be someone of ordinary skill. The Federal Circuit further noted in *Allvoice* that this "definition is consistent with the level of skill ascertained in other software patent disputes. See, e.g., Data Race, Inc. v. Lucent Techs., Inc., 73 F.Supp.2d 698, 746 n. 330 (W.D.Tex.1999) ('Bachelor of Science degree in electrical engineering, computer science or 3-5 years of recent experience in the field'); Katz v. AT & T Corp., 63 F.Supp.2d 583, 594 n. 2 (E.D.Pa.1999) ('[a]t least a Bachelor's degree in a scientific or engineering field, such as physics, electrical engineering, or computer science, and at least two years experience working in the field of computer telephony')." *Id.*

The final error committed by the Examiner was the failure to determine whether a person of ordinary skill in the art would be able to recognize the structure in the specification and associate it with the corresponding function in the claim. It defies credulity that someone who has a degree in computer science or something equivalent and 2-3 years experience programming would not recognize the structure of step 708 (receive owner registration data and item data) in the flowchart algorithm of Fig. 7 and associate it with the claimed function of "receiving owner registration data and item data."

In this regard, *Allvoice* is further instructive. Two of the disputed claim limitations in *Allvoice* were "means, independent of the one computer-related application, for forming link data linking a portion of the audio data to at least one of the recognized words independently of the one computer-related application;" and "means, independent of the one computer-related application, for updating position identifiers in response to changes in positions of the recognized words within the one computer-related application." The Federal Circuit held that the following flowchart algorithm provided the corresponding structure, in addition to the associated description in the specification:

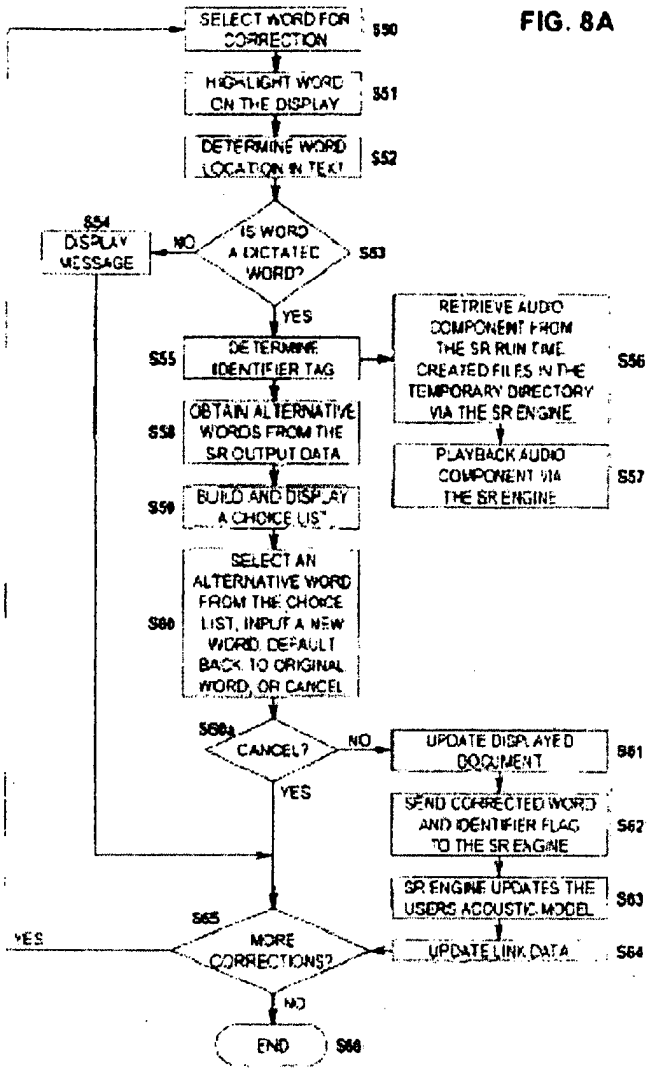

FIG. 8A

Consider the function of "forming link data linking a portion of the audio data to at least one of the recognized words independently of the one computer-related application" from *Allvoice*. The only disclosure in Fig. 8A of the patent in suit in *Allvoice* that is even remotely related to that function is S64, "update link data," which, unlike the current application, is not even identical to claimed function. Likewise, for the function of "means, independent of the one computer-related application, for updating position identifiers in response to changes in positions of the recognized words within the one computer-related application," nothing in the flowchart uses any of the explicit language from the claim, but it is noted that a number of the steps appear to relate to that function. Clearly, if the Federal Circuit concluded that one of ordinary skill

could associate the claimed function in *Allvoice* using only the flowchart algorithm and associated description shown above, identity of function with the flowchart algorithm satisfies 35 U.S.C. 112, second paragraph.

This was in fact confirmed by the Federal Circuit, not only in *Allvoice*, but in earlier cases as well. *Allvoice*, at 1245 ("In software cases, therefore, algorithms in the specification need only disclose adequate defining structure to render the bounds of the claim understandable to one of ordinary skill in the art. *See, e.g., Med. Instrumentation and Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1214 (Fed. Cir.2003) ("[H]ere there would be no need for a disclosure of the specific program code if software were linked to the converting function and one skilled in the art would know the kind of program to use.") The Examiner has failed to apply the proper and controlling case law in construing this element of claim 15, and one of even rudimentary skill in the art could write a program instruction to receive owner registration data and item data, such as "read owner_registration_data, item_data" in Fortran where owner_registration_data and item_data have been previously defined as variables holding owner registration data and item data, respectively. Given the level of skill recognized by the Federal Circuit in software patent cases and identity of the claimed function with the structure disclosed in the flowchart algorithm of Fig. 7 in this case, this element of claim 15 clearly satisfies 35 U.S.C. 112, second paragraph. Review of the other means plus function limitations of claims 15 and 16 reveals that they also satisfy 35 U.S.C. 112, second paragraph. Accordingly, the rejection of claims 15 and 16 under 35 U.S.C. 112, second paragraph must be **REVERSED**.

Rejection of Claims 15 and 16 under 35 USC 101 The Examiner has failed to properly apply controlling federal Circuit law that establishes that in "a means-plus-function claim in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, ***the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm***." *WMS Gaming, Inc. v. Int'l Game Technology*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). (Emphasis added.) Indeed, it was *WMS Gaming* that was the basis for the decision in *AllVoice*. In fact, the Examiner **admits** that claims 15 and 16 contain software (data) structures, an admission that is plainly at odds with the position that the structure corresponding to the claimed means plus function limitation fails to satisfy 35 U.S.C. 112, second paragraph. Claims 15 and 16 have been drafted in a manner to specifically invoke statutory and case law to claim statutory subject matter.

The Examiner responds to Appellant's arguments in this regard stating that the specification discloses system 100 and item registration system 102, which can be implemented in hardware, software or a suitable combination of hardware and software, and which can be one or more software systems operating on a general purpose server platform, and further asserting that the "broadest reasonable interpretation could consist of nothing more than software." Again, the Examiner is at odds with controlling case law. As provided by *In re Donaldson Co.*, 16 F.3d 1189 (Fed. Cir. 1994), "Per our holding, the 'broadest reasonable interpretation' that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination." The Examiner has relied on subject matter in the specification which has been held not to provide any structure under 35 U.S.C. 112(6), see, e.g., *Harris Corp. v. Ericsson Inc.*,417 F.3d 1241, 1253 (Fed. Cir. 2005) ("a computer-implemented means-plus-function term is limited to the corresponding structure disclosed in the specification and equivalents thereof, and the corresponding structure is the algorithm." The court in that case characterized the rule of WMS Gaming as follows: "[T]he corresponding structure for a § 112 ¶ 6 claim for a computer-implemented function is the algorithm disclosed in the specification." *417 F.3d at 1249.* The materials relied on by the Examiner in response to the Appellants' arguments are not an algorithm (unlike the admitted algorithms from the Examiner's rejection under 35 U.S.C. 101), but rather functional descriptive material. Accordingly, the rejection of claims 15 and 16 under 35 U.S.C. 101 must be **REVERSED**.

Rejection of Claims 1, 4-20 and 22 under 35 USC 102 While the Examiner does address some claim construction arguments, it is noted that a number of arguments are not addressed by the Examiner. Of course, as claim construction is reviewed *de novo*, no weight would be given to the Examiner's construction in any event, but the failure of the Examiner to even articulate an argument confirms that there simply are no compelling arguments.

Claim 1 The Examiner argues that "owner" is properly construed as a library "patron" that borrows a book. The broadest reasonable construction of "owner" is its ordinary meaning. The Examiner argues that "buyer" and "owner" do not functionally affect the outcome of the system. It is not clear which "system" the Examiner is referring to, as the examiner discusses the system of Bowers as disclosing that the library is the "owner" and the patron is the "buyer,"

admitting that while the patron is under an obligation to return the item that has been borrowed, that it does not functionally affect "the initial transaction of the transfer of possession." However, that is simply not correct. Consider the limitation of "an owner registration system receiving owner registration data after a buyer has acquired the item," which the Examiner asserts is met by the database that stores the patron (which is construed as the "buyer") identification information articles to be borrowed. If the library is the "owner," then the database must receive library registration data after the patron acquires the item. However, the library is already registered as the owner, and library registration data is not received after the patron borrows the item. The limitation of "an owner registration system receiving owner registration data after a buyer has acquired the item" only makes sense when the buyer acquires the item and becomes the owner, at which point the owner registration system receives owner registration data. Thus, the fact that the patron of Bowers must return the borrowed items to the library does functionally affect "the initial transaction of the transfer of possession." If the patron is not becoming an owner, there is no need for an owner registration system receiving owner registration data after a buyer has acquired the item.

Claim 4 The Examiner argues for the first time on appeal in response to Appellant's arguments that "an event verification system providing event verification data associated with the item while it was in use" is disclosed by Fig. 8, which states "number of times placed in interior book drop." This relates to the article being returned. In the original rejection, the Examiner relied on the interrogator, that is part of the process of checking out a book from the library of Bowers. However, neither a system for checking the item out or a system for returning the item is event verification data associated with the item while it was in use. The library book is not "in use" while it is being checked out, as a patron cannot read the library book while it is being checked out, just like it is not "in use" while it is being dropped in the book drop. Based on the plain meaning of the claim term "an event verification system providing event verification data associated with the item while it was in use," systems used to check items out for use or to check items in after use cannot satisfy the claim limitation.

Claim 5 The Examiner argues for the first time on appeal that Fig. 8 displays "the record of patrons who have possessed the books are recorded as a chain of custody which are distinct individuals who have possessed the item." Fig. 8 discloses no such information. No figure of Bowers discloses any such information, and nothing in Bowers discloses that "the record of

patrons who have possessed the books are recorded as a chain of custody which are distinct individuals who have possessed the item." "Chain," "custody," "chain of custody" and any other related terms are simply not used anywhere in Bowers. Short of fabricating out of whole cloth material that is not disclosed in Bowers or any other cited reference, the Examiner is unable to identify where this claim element is found. Furthermore, the Examiner is not even examining the relevant claim limitation, which is "the purchaser verification system further comprises a chain of custody system receiving purchase location data and ***determining whether chain of custody data exists for the item that ends at the purchase location***." The library system of Bowers doesn't even need such a system, as all items are checked out and returned to the same location. Based on the broadest reasonable construction, which would be the ordinary meaning, Bowers simply fails to have any relevance to claim 5.

Claim 6 Again, the Examiner presents new arguments for the first time on appeal in response to Appellant's arguments, but those arguments do not address the claim language. Claim 6 includes "an alert system generating an alert to an operator if the associated item data does not correlate to the owner registration data." The Examiner has previously construed "owner" as being the library, but argues that when "the item is removed without the data being updated as checked out by the patron, the owner registration data does not correlate." Based on the Examiner's own construction, that would be "an alert system generating an alert to an operator if the associated item data does not correlate to the buyer data." The Examiner changes construction of terms to suit the particular claim at hand, but claim terms cannot have one meaning in the context of an independent claim and a different meaning in the context of a claim that depends from that dependent claim, particularly where such alternative meanings render the claims indefinite. The Examiner's construction essentially equates owner and buyer, which leads to an indefinite construction.

Claim 7 Again, the Examiner presents arguments in response to the arguments in Appellant's Brief that bear no relationship to the claim at issue, which includes "an item transfer system receiving purchaser data from an owner and requesting confirmation from a purchaser based on the purchaser data." The Examiner argues that this limitation is met by database 66 is then updated to show that the article 22 has been checked out to the patron currently using the station 50. The relevance of the citation from Bowers is simply not apparent. Where is purchaser data received from an owner? Where is confirmation requested from a purchaser

based on the purchaser data? The borrower checks out a book, and the status in the database is updated to reflect that the book has been checked out. If the borrower is construed to be the purchaser (and it is admittedly difficult to determine exactly what in Bowers the Examiner is asserting to correlate to any claim limitation), when does the owner (the library?) provide purchaser data (the patron?) to an item transfer system, and when does the item transfer system request confirmation from the purchaser (the patron?) based on the purchaser data? If database 66 is the item transfer system, it would have to request confirmation from the patron based on the patron data provided by the patron to the library to check out the book. But Bowers doesn't do that!

Claim 8 The Examiner improperly tries to import limitations from the specification into the claim to rebut the presumption that the use of different terms connotes different meanings, stating that the specification describes personage verification system 208 as "open-ended" because it states that it can include "other suitable data." Other suitable data apparently means to the Examiner "any data that the Examiner can't find in a reference." There is no special definition for "a personage verification system receiving personage data and providing item data that corresponds to the personage data" provided in the specification, and the Examiner has failed to rebut the presumption that the use of different terms connotes different meanings.

Claims 9-20 and 22 Rather than repeat the analysis above for every claim, Appellants simply note that in almost every case, the Examiner does not rely on the sections of Bowers relied on to reject the claims, but rather cites to different equally unrelated portions of Bowers. It is interesting to note in regards to claim 17, which includes "an authentication device attached to the item in a manner that allows the authentication device to be read by an authentication device reader and that generates an indication if the authentication device is removed from the item," the Examiner argues that this is disclosed by "the interrogator receives the response signals regardless of the orientation of the articles." The Examiner argues that "if the authentication device is removed from the item, then it would be physically evident from the absence of the device which was originally present." How does this meet the limitation of generating an indication if the authentication device is removed from the item? How would one even know if the authentication device of Bowers was ever originally present? If a patron brings a book to the library, how does the library tell the difference between that book and a book that a patron has removed the RFID tag from? Also, in regards to claim 22, the Examiner again improperly reads

limitations from the Specification into the claim. Bowers fails to disclose the claimed invention, and the rejection of claims 1, 4-20 and 22 under 35 U.S.C. 102(b) as being anticipated by Bowers should be **REVERSED**.

Rejection of Claims 2 and 3 under 35 USC 103(a)

Claim2 The Examiner argues that a tamper proof hologram on a substrate with an overlying clear film meets the limitations of "a radio frequency identification tag having a unique identifier; a metallic tag having a hologram etched upon a surface; and a peel-away adhesive layer affixed to the radio frequency identification tag and the metallic tag, wherein a portion of the peel-away adhesive layer remains affixed to the item if the authentication device is removed from the item." Molee's tamper proof hologram is not disclosed as leaving anything on the item if it is removed. If anything, it suggests that the hologram would somehow be modified.

Claim 3 Claim 3 includes the system of claim 2 wherein the radio frequency identification tag is affixed to the peel-away adhesive layer and is separate from the metallic tag, such that the radio frequency identification tag remains affixed to the item if the authentication device is removed from the item. Again, the Examiner relies on the tamper-proof hologram of Molee, which clearly lacks numerous claim elements. Bowers in view of Molee fails to provide a prima facie basis for the rejection of claims 2 and 3, as they fail to disclose each element of the claimed invention, and the rejection of claims 2 and 3 under 35 U.S.C. 103(a) should be **REVERSED**.

Rejection of Claim 21 under 35 USC 103(a)

Claim 21 Claim 21 includes the system of claim 1 further comprising an item appraisal system receiving item appraisal data and associating the item appraisal data with item data. The Examiner cites to cost tracking on a per-use or per activity basis of Conway, whichever is the most accurate measure of the costs of personnel and/or equipment, and to a non-contemporaneous dictionary definition that is therefore irrelevant, but which states that an appraisal is an estimate of value, as for sale, assessment or taxation; valuation. Cost tracking on a per-use or per activity basis of Conway, whichever is the most accurate measure of the costs of personnel and/or equipment, is not an item appraisal system receiving item appraisal data and associating the item appraisal data with item data, based on the Examiner's own definition of appraisal. If a $500,000 piece of equipment, say a carnival ride, costs $3 per ride, then tracking the number of rides is not an appraisal of the equipment. Likewise, a $40 million painting

hanging in a house would have no costs to be tracked on a per-use or per activity basis.– it would be worth $40 million if nobody ever viewed it, or if it was viewed a thousand times a day. Conway simply fails to disclose an item appraisal system receiving item appraisal data and associating the item appraisal data with item data, and while it does disclose a cost tracking system, that is not what is encompassed by claim21. Bowers in view of Conway fails to provide a prima facie basis for the rejection of claim 21, as they fail to disclose each element of the claimed invention, and the rejection of claim 21 under 35 U.S.C. 103(a) should be **REVERSED**.

Dated: May 13, 2009

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